

**Secretary's Order No.: 2010-A-0038**

**RE: Approving Final Amendment to 7 DE Admin. Code 1138,  
Emission Standards for Hazardous Air Pollutants for Source Categories,  
New Section 16.0: "Area Source Asphalt Processing and Asphalt Roofing Products  
Manufacturing Operations".**

**Date of Issuance: November 10, 2010**

**Effective Date of the Amendment: December 11, 2010**

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department" or "DNREC") the following findings, reasons and conclusions are entered as an Order of the Secretary in the above-referenced rulemaking proceeding.

**Background and Procedural History**

This Order considers the proposed regulatory amendment to 7 DE Admin. Code 1138, Emission Standards for Hazardous Air Pollutants for Source Categories, Section 16.0, "Area Source Asphalt Processing and Asphalt Roofing Products Manufacturing Operations". This proposed new Section 16.0 is based upon a federal rule that the U.S. Environmental Protection Agency (EPA) promulgated at 40 CFR Part 63, Subpart AAAAAAA, and is applicable to new and existing asphalt processing operations and asphalt roofing manufacturing operations located at area sources.

This area source standard addresses the emissions of polycyclic aromatic hydrocarbons (“PAHs”), which represent a broad class of aromatic compounds. EPA has classified seven PAHs (benzo[a]pyrene, benz[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene) as probable human carcinogens. The major non-cancerous effects from chronic inhalation exposure are diseases associated with the respiratory tract. The purpose of this proposed regulatory action is to provide increased protection for Delaware citizens against the aforementioned potential adverse health effects linked to the aforementioned PAHs.

Facilities that will be subject to Section 16 include facilities that conduct asphalt processing operations, as well as facilities that manufacture roofing products, such as roofing shingles, rolled roofing and tar paper. Roofing companies that install built-up roofing systems on buildings are exempt from this proposed regulation, even if one of the layers is asphalt. Hot mix asphalt cement plants are also exempt from this regulation (asphalt cement is used in road construction, parking lots, and storage pads).

The proposed Section 16 specifies emissions limitations from the asphalt process operations and asphalt roofing products manufacturing operations. Asphalt roofing products manufacturing operations must also limit their emissions to either a particulate matter or polycyclic aromatic hydrocarbon level. Facilities have some freedom in choosing the control technology they wish to use to maintain their emissions below said limitations. Based on the already demonstrated use in the industry, the EPA has already approved the use of thermal oxidizers, high efficiency air filter, fiber bed filters, and electrostatic precipitators to control the emissions from asphalt processing operations and

asphalt roofing products manufacturing operations. Should a facility wish to use a different control technology, the proposed regulation provides the procedure to follow to request the EPA's approval of alternative controls.

In addition to the above compliance requirements for facilities subject to Section 16.0, each such facility must be found compliant with the following four requirements as well:

- The development and implementation of a startup, shutdown, and malfunction plan, which shall provide appropriate operation instructions, proper corrective actions during malfunctions, required maintenance and inspection schedules, and proper maintenance procedures;
- The development and implementation of a site specific monitoring plan, which shall identify the appropriate monitoring locations, define the proper performance and equipment specification for the monitoring system, and document the various procedure needed to insure the quality of the data collected by the monitoring system;
- The demonstration of its initial compliance with the emission limitation for each operation, which is done by conducting a performance test and comparing the emission results of the performance test with the applicable emission limitation and
- The demonstration of its ongoing compliance with the emission limitation for each operation.

The Department's Division of Air Quality (DAQ) commenced the regulatory development process with Start Action Notice 2009-17. The Department published the

proposed regulatory amendment in the September 1, 2010 *Delaware Register of Regulation* and held a public hearing on September 22, 2010. The Department's presiding hearing officer, Lisa A. Vest, prepared a Hearing Officer's Report dated November 1, 2010 (Report). The Report recommends certain findings and the adoption of the proposed Amendment as attached to the Report as Appendix A.

### **Findings and Discussion**

I find that the proposed Amendment is well-supported by the record developed by the Department, and adopt the Report to the extent it is consistent with this Order. The Department's experts developed the record and drafted the proposed Amendment.

I find that the Department's DAQ expert fully developed the record to support adoption of this Amendment. With the adoption of the regulation amendment to 7 DE Admin. Code 1138, Emission Standards for Hazardous Air Pollutants for Source Categories, Section 16.0, "Area Source Asphalt Processing and Asphalt Roofing Products Manufacturing Operations", Delaware will be able to mirror the recently issued federal rule promulgated by the U.S. Environmental Protection Agency (EPA) at 40 CFR Part 63, Subpart AAAAAAA and provide increased protection for Delaware citizens against potential adverse health effects linked to long-term exposure to the aforementioned PAHs, which are (1) known probable human carcinogens; and (2) have additional non-cancerous effects from chronic inhalation exposure, including diseases associated with the respiratory tract.

In conclusion, the following findings and conclusions are entered:

1.) The Department has jurisdiction under its statutory authority to issue an Order adopting this proposed Amendment as final;

2.) The Department provided adequate public notice of the proposed Amendment, and provided the public with an adequate opportunity to comment on the proposed Amendment, including at a public hearing;

3.) The Department held a public hearing on September 22, 2010 on the proposed Amendment in order to any consider public comments before making any final decision;

4.) The Department's Hearing Officer's Report, including its recommended record and the recommended Amendment as set forth in Appendix A, are adopted to provide additional reasons and findings for this Order;

5.) The recommended Amendment does not reflect any substantive change from the proposed regulation Amendment as published in the September 1, 2010, *Delaware Register of Regulations*;

6.) The recommended Amendment should be adopted as final regulation Amendment because Delaware will then be enabled to (1) mirror the recently issued federal rule promulgated by the U.S. Environmental Protection Agency (EPA) at 40 CFR Part 63, Subpart AAAAAAA; and (2) provide increased protection for Delaware citizens against potential adverse health effects linked to long-term exposure to the aforementioned PAHs, which are known probable human carcinogens, and have additional non-cancerous effects from chronic inhalation exposure, including diseases associated with the respiratory. Moreover, the regulation amendment is well supported by documents in the record; and

7.) The Department shall submit this Order approving the final regulation to the *Delaware Register of Regulations* for publication in its next available issue, and provide such other notice as the law and regulation require and the Department determines is appropriate.

/s/ David S. Small, Acting Sec. (for)  
Collin P. O'Mara  
Secretary